

# Breakout Session 3: *Protective Clothing Technologies, Materials and Performance Criteria*

Angie M. Shepherd

National Institute for Occupational Safety and Health  
National Personal Protective Technology Laboratory  
PPT Stakeholder Meeting

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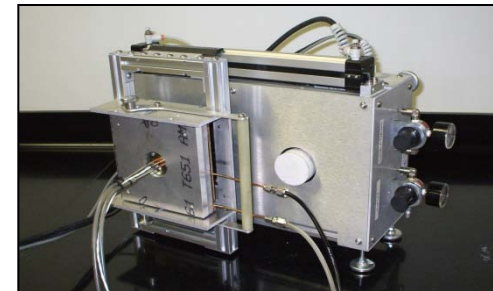
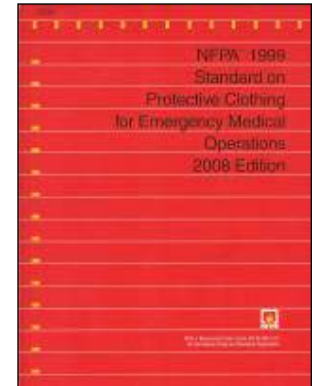
# Session Objectives

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- Review a sampling of the current research efforts in the area of protective clothing
- Provide answers to five questions from the NIOSH PPT Program concerning protective clothing through brainstorming and discussion

# NIOSH Protective Clothing Research

- EMS Protective Clothing
- Chemical Protective Clothing Decontamination Efficacy
- Particle Penetration Measurements on Protective Clothing and Ensembles
- Stored Thermal Energy Test Method
- Risk-Based Material Permeation Criteria
- Validation of the Total Heat Loss Test
- Biomechanical and Physiological Study of Firefighter Boots



# NIOSH Protective Clothing Research

- Mine Rescue Ensembles
- Air-Fed Ensembles
- Comparison of Ensemble Total Inward Leakage (TIL) Tests
- Firefighter Fatality Investigation and Prevention Program
- Total Heat Loss Test Validation
- Physiology
- Ergonomics
- Skin Notation and Dermal Hazards



# PPT Program Questions

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1. What are the principal problems with existing protective clothing PPE?
2. What are the emerging issues, hazards, and threats related to protective clothing PPE?
3. What are the primary challenges for manufacturers to design and produce protective clothing PPE that can be certified?
4. Are there very near-term things that can be done to effect almost immediate improvements to protective clothing PPE?
5. What are the two or three most important things that NIOSH should do to support the development and use of advanced protective clothing PPE?

# PPT Discussion Question 1

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**What are the principal problems with existing protective clothing PPE?**

# PPT Discussion Question 2

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**What are the emerging issues, hazards, and threats related to protective clothing PPE?**

# PPT Discussion Question 3

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**What are the primary challenges for manufacturers to design and produce protective clothing PPE that can be certified?**



# PPT Discussion Question 4

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**Are there very near-term things that can be done to effect almost immediate improvements to protective clothing PPE?**

# PPT Discussion Question 5

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**What are the two or three most important things that NIOSH should do to support the development and use of advanced protective clothing PPE?**

# Thank You

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- Your participation and input are greatly appreciated
- Please browse the posters on protective clothing and talk with the researchers for additional information

# Quality Partnerships Enhance Worker Safety & Health

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**Angie M. Shepherd**

Email: AMShepherd@cdc.gov

Phone: 412-386-5245

[www.cdc.gov/niosh/npptl/default.html](http://www.cdc.gov/niosh/npptl/default.html)

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